ONFI Technical Errata

Errata ID 001
Affected Spec Ver. BA NAND 1.0
Corrected Spec Ver.

Submission info

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Date</th>
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<td>Amber Huffman</td>
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<td>2/27/2008</td>
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Description of the specification technical flaw (add space as needed)

There are several modifications and clarifications applied to the Block Abstracted NAND specification.

The tFEAT parameter is modified to be tWL maximum for BA NAND devices. This allows for intermediate processing by the BA NAND controller.

It is clarified that for LBA Read, LBA Write, and LBA Read Metadata operations that all data shall be transferred or an LBA Abort is required before continuing.

It is clarified that a Set Features to the Error information feature is ignored.
Modify the first paragraph of section 1.17 as shown:

1.17  Feature Parameter Definitions
Feature settings are volatile across power cycles. For each feature setting, whether the value across resets is retained is explicitly stated. The timing parameter tFEAT has a maximum of tWL for BA NAND implementations.

Modify the first paragraph of section 1.17.1 as shown:

1.17.1  BA NAND: Error Information
This setting shall be supported if the device supports block abstracted mode. This information shall be retained across Reset commands. A Set Features command issued for this setting shall be ignored by the device.

Modify the first paragraph of section 1.8 as shown:

1.8    LBA Read Definition
The LBA Read function reads sectors of data identified by an LBA and a sector count. The logical block is made available to be read from the data latch. If metadata use is enabled, then the metadata bytes for an addressed sector are returned immediately following the data for the sector. Thus, metadata if used is interspersed between the data sectors returned. Figure 2 defines the LBA Read behavior and timings for the transfer of the first data block. If the host does not transfer all data and metadata requested in an LBA Read request, then the host shall issue an LBA Abort command before continuing with subsequent requests.

Modify the first paragraph of section 1.9 as shown:

1.9    LBA Write Definition
The LBA Write function writes sectors of data identified by an LBA and a sector count to the device. If metadata is used, metadata for a sector shall be written atomically with the corresponding data sector. If metadata use is enabled, then the metadata bytes for an addressed sector are transferred immediately following the data for the sector. Thus, metadata if used is interspersed between the data sectors transferred. Figure 4 defines the LBA Write behavior and timings for the transfer of the first data block. If the host does not transfer all data requested in an LBA Write request, then the host shall issue an LBA Abort command before continuing with subsequent requests.

Modify the first paragraph of section 1.10 as shown:

1.10   LBA Read Metadata Definition
The LBA Read Metadata function returns only the metadata for the sectors identified by an LBA and a sector count. The maximum sector count specified shall be the Sector Multiple value. Metadata shall be enabled prior to use of this command. Figure 6 defines the LBA Read Metadata behavior and timings. If the host does not transfer all metadata requested in an LBA Read Metadata request, then the host shall issue an LBA Abort command before continuing with subsequent requests.
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<tbody>
<tr>
<td>2/27/2008</td>
<td>Erratum captured</td>
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<tr>
<td>3/25/2008</td>
<td>Modification to make tFEAT maximum be tWL</td>
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<tr>
<td>5/9/2008</td>
<td>Erratum ratified</td>
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